

NEW UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(to be used for new applications only)

Docket No.
A52023.2US

Total Pages in this Submission
111

TO THE ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53 is a new utility patent application for an invention entitled:

THERAPEUTIC COMPOSITIONS THAT ALTER THE IMMUNE RESPONSE

and invented by:

MADIYALAKAN, Ragupathy; NOUJAIM, Antoine A.; SYKES, Thomas R.; SCHULTES, Birgit; LEVEUGLE, Beatrice; BAUM, Richard; KREUTZ, Fernando

Enclosed are:

Application Elements

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 100 pages and including the following:
 - ☒ Abstract of the Disclosure
 - ☒ Title of the Invention
 - ☒ Cross References to Related Applications *(if applicable)*
 - ☐ Statement Regarding Federally-sponsored Research/Development *(if applicable)*
 - ☐ Reference to Microfiche Appendix *(if applicable)*
 - ☒ Background of the Invention
 - ☒ Brief Summary of the Invention
 - ☒ Brief Description of the Drawings *(if drawings filed)*
 - ☒ Detailed Description
 - ☒ Claim(s) as Classified Below
3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*
 - ☐ Formal ☒ Informal
 - Number of Sheets 11
4. ☐ Declaration
 - ☐ Executed ☐ Unexecuted ☐ With Power of Attorney ☐ Without Power of Attorney

NEW UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(to be used for new applications only)

Docket No.
A52023.2US

Total Pages in this Submission
111

Application Elements (Continued)

5. ☐ Genetic Sequence Submission *(if applicable, all must be included)*
- ☐ Paper Copy
- ☐ Computer Readable Copy
- ☐ Statement Verifying Identical Paper and Computer Readable Copy

Accompanying Application Parts

6. ☐ Assignment Papers
7. ☐ Computer Program in Microfiche
8. ☐ Information Disclosure Statement/PTO-1449 ☐ Copies of IDS Citations
9. ☐ Petition
10. ☐ Preliminary Amendment
11. ☐ Proprietary Information
12. ☒ Acknowledgment postcard
13. ☐ Small Entity Statement(s) - Specify Number of Statements Submitted: _____
14. ☒ Certificate of Mailing
- ☐ First Class ☒ Express Mail *(Specify Label No.):* EL110243954US
15. ☐ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. ☐ English Translation Document *(if applicable)*

NEW UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(to be used for new applications only)

Docket No.
A52023.2US

Total Pages in this Submission
111

Acc mpanying Applicati n Parts (C ntinued)

17. ☐ Additional Enclosures (please identify below):

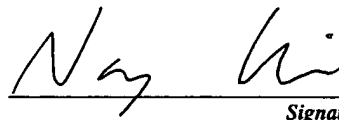
Fee Calculation and Transmittal

CLAIMS AS FILED

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	176	- 20 =	156	x \$9.00	\$1,404.00
Ind p. Claims	10	- 3 =	7	x \$39.00	\$273.00
Multipl Dependent Claims (check if applicable) <input checked="" type="checkbox"/>					\$130.00
BASIC FEE					\$380.00
OTHER FEE (specify purpose)					\$0.00
TOTAL FILING FEE					\$2,187.00

- ☐ A check in the amount of _____ to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. 08-0219 as described below. A duplicate copy of this sheet is enclosed.
- ☒ Charge the amount of \$2,187.00 as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: August 18, 1999


Signature

Nancy Chiu, Ph.D.
Agent for Applicants
Reg. No. 43,545

CC:

A

08/18/99

Serial No.: 09/

Docket Number: A52023.2US (107823.____)

Title: THERAPEUTIC COMPOSITIONS THAT ALTER THE IMMUNE RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

.....

I hereby certify that the attached papers and fees are being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" Service under 37 C.F.R. 1.10 on August 18, 1999 and is addressed to: **BOX PATENT APPLICATION**, Assistant Commissioner for Patents, Washington, D.C. 20231.

EL110243954US
"Express Mail" Label No.

Nay Ki
Signed Name

Nancy Chiu
Printed Name

Dear Sir:

TRANSMITTAL LETTER

Enclosed herewith for filing in the United States Patent and Trademark office are the following documents:

- 1) Utility Application Cover Sheet (three pages);
- 2) Utility Application (111 pages) with 100 pages of specification and 11 sheets of informal drawings; and
- 3) Return postcard.

Please address all correspondence to:

William J. Bundren
The Law Office of William J. Bundren
576 Farmington Road, West
Accokeek, Maryland 20607-9796.

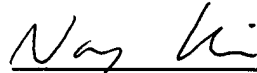
2025
2024
2023
2022
2021
2020
2019
2018
2017
2016
2015
2014
2013
2012
2011
2010
2009
2008
2007
2006
2005
2004
2003
2002
2001
2000
1999
1998
1997
1996
1995
1994
1993
1992
1991
1990
1989
1988
1987
1986
1985
1984
1983
1982
1981
1980
1979
1978
1977
1976
1975
1974
1973
1972
1971
1970
1969
1968
1967
1966
1965
1964
1963
1962
1961
1960
1959
1958
1957
1956
1955
1954
1953
1952
1951
1950
1949
1948
1947
1946
1945
1944
1943
1942
1941
1940
1939
1938
1937
1936
1935
1934
1933
1932
1931
1930
1929
1928
1927
1926
1925
1924
1923
1922
1921
1920
1919
1918
1917
1916
1915
1914
1913
1912
1911
1910
1909
1908
1907
1906
1905
1904
1903
1902
1901
1900
1899
1898
1897
1896
1895
1894
1893
1892
1891
1890
1889
1888
1887
1886
1885
1884
1883
1882
1881
1880
1879
1878
1877
1876
1875
1874
1873
1872
1871
1870
1869
1868
1867
1866
1865
1864
1863
1862
1861
1860
1859
1858
1857
1856
1855
1854
1853
1852
1851
1850
1849
1848
1847
1846
1845
1844
1843
1842
1841
1840
1839
1838
1837
1836
1835
1834
1833
1832
1831
1830
1829
1828
1827
1826
1825
1824
1823
1822
1821
1820
1819
1818
1817
1816
1815
1814
1813
1812
1811
1810
1809
1808
1807
1806
1805
1804
1803
1802
1801
1800
1799
1798
1797
1796
1795
1794
1793
1792
1791
1790
1789
1788
1787
1786
1785
1784
1783
1782
1781
1780
1779
1778
1777
1776
1775
1774
1773
1772
1771
1770
1769
1768
1767
1766
1765
1764
1763
1762
1761
1760
1759
1758
1757
1756
1755
1754
1753
1752
1751
1750
1749
1748
1747
1746
1745
1744
1743
1742
1741
1740
1739
1738
1737
1736
1735
1734
1733
1732
1731
1730
1729
1728
1727
1726
1725
1724
1723
1722
1721
1720
1719
1718
1717
1716
1715
1714
1713
1712
1711
1710
1709
1708
1707
1706
1705
1704
1703
1702
1701
1700
1699
1698
1697
1696
1695
1694
1693
1692
1691
1690
1689
1688
1687
1686
1685
1684
1683
1682
1681
1680
1679
1678
1677
1676
1675
1674
1673
1672
1671
1670
1669
1668
1667
1666
1665
1664
1663
1662
1661
1660
1659
1658
1657
1656
1655
1654
1653
1652
1651
1650
1649
1648
1647
1646
1645
1644
1643
1642
1641
1640
1639
1638
1637
1636
1635
1634
1633
1632
1631
1630
1629
1628
1627
1626
1625
1624
1623
1622
1621
1620
1619
1618
1617
1616
1615
1614
1613
1612
1611
1610
1609
1608
1607
1606
1605
1604
1603
1602
1601
1600
1599
1598
1597
1596
1595
1594
1593
1592
1591
1590
1589
1588
1587
1586
1585
1584
1583
1582
1581
1580
1579
1578
1577
1576
1575
1574
1573
1572
1571
1570
1569
1568
1567
1566
1565
1564
1563
1562
1561
1560
1559
1558
1557
1556
1555
1554
1553
1552
1551
1550
1549
1548
1547
1546
1545
1544
1543
1542
1541
1540
1539
1538
1537
1536
1535
1534
1533
1532
1531
1530
1529
1528
1527
1526
1525
1524
1523
1522
1521
1520
1519
1518
1517
1516
1515
1514
1513
1512
1511
1510
1509
1508
1507
1506
1505
1504
1503
1502
1501
1500
1499
1498
1497
1496
1495
1494
1493
1492
1491
1490
1489
1488
1487
1486
1485
1484
1483
1482
1481
1480
1479
1478
1477
1476
1475
1474
1473
1472
1471
1470
1469
1468
1467
1466
1465
1464
1463
1462
1461
1460
1459
1458
1457
1456
1455
1454
1453
1452
1451
1450
1449
1448
1447
1446
1445
1444
1443
1442
1441
1440
1439
1438
1437
1436
1435
1434
1433
1432
1431
1430
1429
1428
1427
1426
1425
1424
1423
1422
1421
1420
1419
1418
1417
1416
1415
1414
1413
1412
1411
1410
1409
1408
1407
1406
1405
1404
1403
1402
1401
1400
1399
1398
1397
1396
1395
1394
1393
1392
1391
1390
1389
1388
1387
1386
1385
1384
1383
1382
1381
1380
1379
1378
1377
1376
1375
1374
1373
1372
1371
1370
1369
1368
1367
1366
1365
1364
1363
1362
1361
1360
1359
1358
1357
1356
1355
1354
1353
1352
1351
1350
1349
1348
1347
1346
1345
1344
13

Transmittal Letter
Express Mail No. EL110243954US
Page 2

Please charge any applicable fees to the Deposit Account No. 08-0219.

Respectfully submitted,

HALE AND DORR LLP



Nancy Chiu, Ph.D.
Registration No. 43,545
Agent for Applicants

60 State Street
Boston, MA 02109
Tel. (617) 526-6000
Fax. (617) 426-5000

Date: August 18, 1999

003130-4099250